

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS FO Box 1450 Alexandra, Virgenia 22313-1450 www.usple.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO.
09/943,574	08/30/2001	Georges Smits	MALD RAFF.16 CON2	2537
7	7590 07/15/2003			
	ay, Hennessey, Grossn	EXAMINER		
175 Canal Street Manchester, NH 03101			OWENS JR, HOWARD V	
			ART UNIT	PAPER NUMBER
			1623	
			DATE MAILED: 07/15/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		09/943,574	SMITS ET AL.			
Office Action Summary		Examiner	Art Unit			
		Howard V Owens	1623			
	The MAILING DATE of this communication app	pears on the cover sheet	with the correspondence address			
Period fo		V 10 00T TO EVDIDE 4	MONITH(C) FROM			
THE I - Externation - It the - If NC - Failu - Any I	ORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. It period for reply specified above is less than thirty (30) days, a reply operiod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b)	36(a). In no event, however, may y within the statutory minimum of t will apply and will expire SIX (6) M , cause the application to become	a reply be timely filed hirty (30) days will be considered timely. ONTHS from the mailing date of this communication. ABANDONED (35 U S.C. § 133).			
1)[Responsive to communication(s) filed on 24 M	March 2003				
2a)⊡	· · · · · · · · · · · · · · · · · · ·	is action is non-final.				
3)	Since this application is in condition for allows		patters, prosecution as to the merits is			
ŕ	closed in accordance with the practice under					
· · _	ion of Claims					
	Claim(s) <u>30-59</u> is/are pending in the application					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
	Claim(s) is/are allowed.					
· ·	Claim(s) <u>30-59</u> is/are rejected					
· · · · · · · · · · · · · · · · · · ·	Claim(s) is/are objected to					
•	Claim(s) are subject to restriction and/o ion Papers	r election requirement.				
	The specification is objected to by the Examine	r				
	The drawing(s) filed on is/are: a)☐ accept		v the Examiner			
10,	Applicant may not request that any objection to the					
11) 🗌 .	The proposed drawing correction filed on		disapproved by the Examiner.			
,—	If approved, corrected drawings are required in re					
12) The oath or declaration is objected to by the Examiner.						
Priority u	under 35 U.S.C. §§ 119 and 120					
13)	Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C	C. § 119(a)-(d) or (f).			
a)l	☐ All b)☐ Some * c)☐ None of:					
	1. Certified copies of the priority document	s have been received.				
	2. Certified copies of the priority documents have been received in Application No					
* 5	3. Copies of the certified copies of the prior application from the International Buse the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).			
	Acknowledgment is made of a claim for domesti	·				
) ☐ The translation of the foreign language pro Acknowledgment is made of a claım for domest	• •				
Attachmen	t(s)					
2) 🔲 Notic	e of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) _	5) Notice	w Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152)			

Application/Control Number: 09/943,574

Art Unit: 1623

Response to Arguments

The following is in response to the amendment filed 3/24/03:

An action on the merits of claims 30 - 59 is contained herein below.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Nonstatutory Double Patenting

Applicant's arguments filed 3-24-03 have been fully considered but they are not persuasive. The rejection of claims 45-59 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6,303,778 is maintained for the reasons of record set forth herein.

An obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but an examined application claim not is patentably distinct from the reference claim(s) because the examined claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 40-59 are generic to all that is recited in claims 1-9 of U.S. Patent No. 6,303,778. That is, claims 1-9 of U.S. Patent No. 6,303,778 ('778) fall entirely within the scope of claims 45-59, in other words, claims 45-59 are anticipated by claims 1-9 of '778. The washing steps of claim 2 of '778 would inherently include washing with water set forth in instant claim 2. Instant claims limit the process for producing a fractionated polydisperse inulin composition, wherein the native polydisperse inulin is native chicory inulin or fractionated chicory inulin and the rapid cooling is between 15° C and 25° C at a rate between 1° C and 7° C/sec., respectively.

Application/Control Number: 09/943,574 Page 3

Art Unit: 1623

Claims 45-59 contain physical properties of the composition produced which purportedly differentiate the claims from those of '778; however, the process is the same. If the process does not change, it is inherent that the products formed therefrom also would not change. Thus even though there is no recitation of the specific properties such as radial symmetry and perpendicular fade cross, the process of the instant claims and those of '778 are the same.

Claim Rejections – 35 U.S.C. 103

Applicant's arguments filed 3-24-03 have been fully considered but they are not persuasive. The rejection of claims 30-44 under 35 U.S.C. 103 over Kunz et al. (Kunz), U.S. Patent No. 5,478,432 is maintained for the reasons of record set forth herein.

Claims 30-44 are drawn to a fractionated polydisperse fructan composition having an avg. degree of polymerization (DP) double or higher than the avg. DP of native polydisperse carbohydrate, containing essentially no monomers, dimers and oligomers; wherein said composition is included in pharmaceutical, cosmetical food and/or feed compositions. These composition claims have been amended to include physical properties such as radial symmetry, double breaking and perpendicular fade cross to distinguish the claims from the prior art of record.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Kunz teaches a polydisperse fractionated fructan composition in the form of inulin (crude inulin= chicory) wherein the DP is >20, and is virtually free from monomers, dimmers and oligomers (DP <10-12) (columns 3-7). Kunz teaches that the benefit of fructan/inulin compositions with longer DP profiles is that any mono-, di- or

Application/Control Number: 09/943,574

Art Unit: 1623

oligosaccharides present in an inulin compositions give undefined product mixtures whose purifications are problematic, tend to be hygroscopic and do not promote the neutral flavor demonstrated in long chain inulins (column 1, lines 33-47).

Applicant admits in the specification it is already known in the art to use fructan compositions containing inulin in pharmaceutical, cosmetic, food and feed products, thus the use of the fructan/inulin composition for these purposes would be obvious to one of skill in the art. Kunz verifies this as it teaches the use of inulin compositions of the invention in foodstuffs and pharmacological active substances (col. 4, lines 51-57).

Kunz does not specifically teach the technical specifications of less than .2 wt% ash, no detectable alcohol, however, Kunz does teach that after separation of the monomers, dimmers and oligomers, the inulin composition is subjected to further purification procedures which promote lowered ash and alcohol content such as strong acid cation exchange resins, ultrafiltration and drying which would certainly promote the ash and alcohol specifications claimed by applicant.

It would have been prima facie obvious to produce a fructan composition having an an avg. degree of polymerization (DP) double or higher than the avg. DP of native polydisperse carbohydrate, containing essentially no monomers, dimmers and oligomers.

One of skill in the art would have been motivated to produce such a composition given the prior art's recognition that mono-, di- or oligosaccharides present in an fructan/inulin compositions give undefined product mixtures whose purifications are problematic, tend to be hygroscopic and do not promote the neutral flavor demonstrated in compositions comprising primarily long chain inulins (>DP 20).

Applicant argues that the prior art does not disclose a polymer composition that is double that of native inulin; however, '738 teaches a composition wherein the polymer length is 20-30 (column 4, lines 42-49), which is 2-3 times the length of native inulin (as acknowledged by applicant in the response to be 10.

The recitation of specific properties such as radial symmetry, double breaking and perpendicular fade cross in the amended claims does not impart critical differences to those of the prior art wherein these technical specifications are not listed. The PTO can

place the burden on applicant to show that the relevant prior art products do not necessarily or inherently possess characteristics of the claimed product. *In re Best et al.* (CCPA 1977) 562 F2d 1252, 195 USPQ 430. As such, the examiner maintains the position that the physical properties claimed are (a) non-critical and (b) inherent in the '738 patent. Even though the claims are process claims, applicant states in the specification (p.23, line 19→) that slowly cooled inulin compositions (similar to the prior art of '738) give spherical (emphasis added) and ellipsoid particles. Therefore applicant has acknowledged that the composition of '738 does produce spherical particles. Double breaking and perpendicular fade cross measurements are not seen to be critical differences in the composition of the invention. The significant property or criticality of the instant claims is the % of dimers/monomers (as contaminants) present, which '738 equally discloses.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

JAMES O. WILSON
SUPERVISORY PATERIT EXAMINER